

Serial No. 10/829,162  
Docket No. K06-169665M/TBS

3

RECEIVED  
CENTRAL FAX CENTER  
NOV 06 2006

### REMARKS

Claims 1 and 2 are all of the claims presently pending the application. Claim 1 has been amended to more particularly define the claimed invention. Claim 5 has been canceled without prejudice or disclaimer (the subject of which has been incorporated into claim 1).

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicants specifically state that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1 and 2 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanaka et al. (U.S. Patent No. 6,086,686; hereinafter "Tanaka '686") or Tanaka et al. (U.S. Patent No. 5,988,042; hereinafter "Tanaka '042").

These rejections are respectfully traversed in the following discussion.

#### **I. THE CLAIMED INVENTION**

The claimed invention of exemplary claim 1 provides a bearing part including damping steel including at least 5.0% and less than 10.0 % by weight of Cr (e.g., see Application at page 4, lines 5-15). This combination of features is important for improving the dampability of bearing parts (see Application at page 3, lines 2-4).

#### **II. THE PRIOR ART REFERENCES**

##### **A. The Tanaka '686 Reference**

The Examiner alleges that the claimed invention of claims 1 and 2 would have been obvious in view of Tanaka '686. Applicants submit, however, that Tanaka '686 does not teach or suggest (nor make obvious) each and every feature of the claimed invention.

Serial No. 10/829,162  
Docket No. K06-169665M/TBS

4

That is, Tanaka '686 does not teach or suggest a damping steel including "*at least 5.0% and less than 10.0% by weight of Cr*", as recited in claim 1.

The Examiner attempts to rely on column 6, lines 25-54 of Tanaka '686 to support his allegation. The Examiner, however, is clearly incorrect.

That is, nowhere in this passage (nor anywhere else for that matter) does Tanaka '686 teach or suggest a damping steel including at least 5.0% and less than 10.0 % by weight of Cr. Indeed, Tanaka '686 teaches including a larger amount of Cr than the range recited in the claimed invention. Tanaka '686 teaches a bearing steel including 10% to 14% by weight of Cr, which is outside of the range recited in the claimed invention.

The applicants have discovered a specific range for the amount of Cr included a damping steel that achieves a recognized result. The specific Cr amount range recited in claim 1 improves the dampability of the damping steel. That is, Applicants have discovered that Cr improves dampability. Additionally, if the Cr content is too large by weight, then carbide may be readily formed in the damping steel, which reduces the toughness of the damping steel (see Application at page 4, lines 5-15). The range for the amount of Cr recited in exemplary claim 1 is important for achieving the desired results of the claimed invention.

Therefore, Applicants submit that the specific range recited in exemplary claim 1 clearly shows a technical effect and is not arbitrarily selected.

Applicants submit that if the Examiner alleges that Applicants have merely discovered an optimum or workable range of a result effective variable, that the M.P.E.P. provides that "[a] particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation" (M.P.E.P. 2144.05) (emphasis added). Here, the only result that Tanaka '686 suggests as being effected by the amount of Cr in a composition of a damping steel is

Serial No. 10/829,162  
Docket No. K06-169665M/TBS

5

corrosion resistance. This is clearly unrelated to optimizing an amount of Cr for providing the desired results of the claimed invention.

That is, nowhere does Tanaka '686 teach or suggest that the amount of Cr may have any effect on the dampability of the damping steel. Therefore, it is clearly unreasonable to suggest that these references teach or suggest that an amount of Cr in a composition of a damping steel is merely a result-effective variable.

Therefore, Applicants submit that Tanaka '686 does not teach or suggest (nor make obvious) each and every feature of the claimed invention. Therefore, the Examiner is respectfully requested to reconsider and withdraw this rejection.

**B. The Tanaka '042 Reference**

The Examiner alleges that the claimed invention of claims 1 and 2 would have been obvious in view of Tanaka '042. Applicants submit, however, that Tanaka '042 does not teach or suggest (nor make obvious) each and every feature of the claimed invention.

That is, Tanaka '042 does not teach or suggest a damping steel including "*at least 5.0% and less than 10.0% by weight of Cr*", as recited in claim 1.

The Examiner attempts to rely on column 6, lines 45-55 of Tanaka '042 to support his allegation. The Examiner, however, is clearly incorrect.

That is, nowhere in this passage (nor anywhere else for that matter) does Tanaka '042 teach or suggest a damping steel including at least 5.0% and less than 10.0 % by weight of Cr. Indeed, Tanaka '042 teaches including a larger amount of Cr than the range recited in the claimed invention. Tanaka '042 teaches a bearing steel including 10% to 22% by weight of Cr, which is outside of the range recited in the claimed invention.

The applicants have discovered a specific range for the amount of Cr included a damping steel that achieves a recognized result. The specific Cr amount range recited in claim 1 improves the dampability of the damping steel. That is, Applicants have discovered

Serial No. 10/829,162  
Docket No. K06-169665M/TBS

6

that Cr improves dampability. Additionally, if the Cr content is too large by weight, then carbide may be readily formed in the damping steel, which reduces the toughness of the damping steel (see Application at page 4, lines 5-15). The range for the amount of Cr recited in exemplary claim 1 is important for achieving the desired results of the claimed invention.

Therefore, Applicants submit that the specific range recited in exemplary claim 1 clearly shows a technical effect and is not arbitrarily selected.

Applicants submit that if the Examiner alleges that Applicants have merely discovered an optimum or workable range of a result effective variable, that the M.P.E.P. provides that "[a] particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation" (M.P.E.P. 2144.05) (emphasis added). Here, the only result that Tanaka '042 suggests as being effected by the amount of Cr in a composition of a damping steel is corrosion resistance. This is clearly unrelated to optimizing an amount of Cr for providing the desired results of the claimed invention.

That is, nowhere does Tanaka '042 teach or suggest that the amount of Cr may have any effect on the dampability of the damping steel. Therefore, it is clearly unreasonable to suggest that these references teach or suggest that an amount of Cr in a composition of a damping steel is merely a result-effective variable.

Therefore, Applicants submit that Tanaka '042 does not teach or suggest (nor make obvious) each and every feature of the claimed invention. Therefore, the Examiner is respectfully requested to reconsider and withdraw this rejection.

### III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicants submit that claims 1 and 2, all the claims presently pending in the application, are patentably distinct over the prior art of record and

Serial No. 10/829,162  
Docket No. K06-169665M/TBS

7

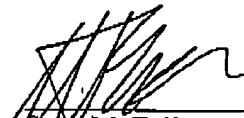
are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: November 6, 2006



Scott M. Tulino, Esq.  
Registration No. 48,317

Sean M. McGinn, Esq.  
Registration No. 34,386

**MCGINN INTELLECTUAL PROPERTY  
LAW GROUP, PLLC**  
8321 Old Courthouse Road, Suite 200  
Vienna, VA 22182-3817  
(703) 761-4100  
Customer No. 21254

**FACSIMILE TRANSMISSION**

I hereby certify that I am filing this paper via facsimile, to Group Art Unit 1742, at (571) 273-8300, on November 6, 2006.

Respectfully Submitted,

Date: November 6, 2006



Scott M. Tulino, Esq.  
Reg. No. 48,317

Sean M. McGinn, Esq.  
Reg. No. 34,386